

IN THE CLAIMS :

The following is a complete listing of the claims, and replaces all earlier version and listings.

1. - 11. (canceled).

12. (currently amended): A network device management apparatus which ~~manages-communicates with~~ a network device ~~that is~~ connected to a network, where the network device has a ~~plurality of~~ print data generating ~~functions-function~~ and does not support any network-compatible Plug and Play function, said apparatus comprising:

~~recognition means for recognizing that the network device does not support a network-compatible Plug and Play function;~~

generating means for generating a ~~plurality of~~ device ~~IDs-ID~~ corresponding to the ~~plurality of~~ print data generating ~~functions-function~~, where ~~each-the~~ device ID includes at least information identifying the model, information indicating the manufacturer and information indicating ~~one of the~~ ~~plurality of~~ print data generating ~~functions-function~~ of the ~~recognized~~ network device,

so that, in accordance with the network-compatible ~~supporting~~ Plug and Play function, a client apparatus on the network can install a ~~plurality of~~ device ~~drivers-driver~~ for controlling the ~~plurality of~~ print data generating ~~functions-function~~ of the network device ~~recognized by said recognition means, and;~~

~~response-sending means for responding-sending to the client apparatus using the~~ ~~plurality of~~ device ~~IDs-ID~~ generated by said generating means;

request means for submitting a get request for device information to the network device specified by the device ID sent by said sending means; and

notification means for notifying the client apparatus that a service of the network device has stopped if said network device management apparatus does not receive a response to the get request from the network device.

13. (previously presented): The apparatus according to claim 12, further comprising storage means for storing protocol information required to communicate with a network device.

14. (currently amended): The apparatus according to claim~~12~~ 13, further comprising control means for, when job information addressed to a virtual representation of the network device ~~that~~ as a device which supports the network-compatible Plug and Play function is received, acquiring an address and protocol information of the ~~corresponding~~ network device from said storage means, converting the job information into the acquired protocol, and transmitting the converted information to the acquired address.

15. (canceled).

16. (currently amended): The apparatus according to claim 13, further comprising:

search means for searching for a network device which does not support ~~any~~ the network-compatible Plug and Play function; and

registration means for registering in said storage means a network address of the network device found by said search means, and information ~~for specifying a protocol~~ one or more protocols, including at least Simple Network Management Protocol (SNMP), used in a communication with the network device found by said search means.

17. (canceled).

18. (previously presented): The apparatus according to claim 12, wherein the network device is a network printer.

19. (canceled).

20. (currently amended): A method of controlling a network device management apparatus which ~~manages~~ communicates with a network device ~~that is connected to a network,~~ where the network device has a ~~plurality of print data generating functions~~ function and does not support any network-compatible Plug and Play function, said method comprising the steps of:

~~recognizing that the network device does not support a network-compatible Plug and Play function;~~

generating a ~~plurality of device IDs~~ ID corresponding to the ~~plurality of print data generating functions~~ function, where ~~each~~ the device ID includes at least information identifying the model, information indicating the manufacturer and information indicating ~~one of the~~ plurality of print data generating functions function of the ~~recognized~~ network device,

so that, in accordance with the network-compatible ~~supporting~~ Plug and Play function, a client apparatus on the network can install a ~~plurality of device drivers~~ driver for controlling the ~~plurality of print data generating functions~~ function of the network device; and ~~responding~~ sending to the client apparatus ~~using the plurality of device IDs~~ ID generated in said generating step;

submitting a get request for device information to the network device specified by the device ID sent in said sending step; and

notifying the client apparatus that a service of the network device has stopped if the network device management apparatus does not receive a response to the get request from the network device.

21. (currently amended): A non-transitory computer-readable storage medium, storing, in executable form, a program for causing a computer to serve as a network device management apparatus which ~~manages~~ communicates with a network device ~~that is connected to~~ a network, where the network device has a ~~plurality of print data generating functions~~ function and does not support any network-compatible Plug and Play function, said program comprising code for performing the steps of:

~~recognizing that the network device does not support any network-compatible Plug and Play function;~~

generating a ~~plurality of device IDs~~ ID corresponding to the ~~plurality of print data generating functions~~ function, where ~~each~~ the device ID includes at least information identifying the model, information indicating the manufacturer and information indicating ~~one of the~~ plurality of print data generating functions function of the ~~recognized~~ network device,

so that, in accordance with the network-compatible ~~supporting~~ Plug and Play function, a client apparatus on the network can install a ~~plurality of device drivers~~ driver for controlling the ~~plurality of print data generating functions~~ function of the network device; ~~and responding~~ sending to the client apparatus ~~using the plurality of device IDs~~ ID generated in said generating step;

submitting a get request for device information to the network device specified by the device ID sent in said sending step; and

notifying the client apparatus that a service of the network device has stopped if said network device management apparatus does not receive a response to the get request from the network device.

22. (canceled).

23. (previously presented): The method according to claim 20, further comprising the step of storing protocol information required to communicate with a network device.

24. (currently amended): The method according to claim ~~20~~ 23, further comprising a control step of, when job information addressed to a virtual representation of the network device as a device which supports the network-compatible Plug and Play function is received, acquiring an address and protocol information of the ~~corresponding~~ network device stored in said storing step, converting the job information into the acquired protocol, and transmitting the converted information to the acquired address.

25. (canceled).

26. (currently amended): The method according to claim 23, further comprising:
a search step of searching for a network device which does not support ~~any~~the
network-compatible Plug and Play function; and
a registration step of registering in storage means a network address of a network
device found in said search step, and information ~~for specifying a protocol~~one or more
protocols, including at least Simple Network Management Protocol (SNMP), used in a
communication with the network device found in said search step.

27. (canceled).

28. (previously presented): The method according to claim 20, wherein the
network device is a network printer.

29. – 34. (canceled).